

APPENDIX C – Pending Claims

Claims

106. (Amended) A method of introducing a protein or factor in a mammal which comprises delivering to a blood vessel in the mammal a transfected vascular cell, the transfected cell originating from the mammal and comprising an exogenous nucleic acid encoding the protein or factor and competent to express the protein or factor when implanted in the mammal.
107. The method of claim 106 wherein the transfected cell becomes attached to the wall of the vessel in the mammal.
108. The method of claim 106 wherein the transfected cell is an endothelial cell or a smooth muscle cell.
109. The method of claim 106 wherein the exogenous nucleic acid encodes a therapeutic agent.
110. The method of claim 106 wherein the recombinant protein [or factor] is competent to induce angiogenesis.
111. The method of claim 106 wherein the recombinant protein.[or factor] is competent to induce revascularization.
112. The method of claim 106 wherein the protein [or factor] is useful in the treatment of an ischemic organ.
113. The method of claim 112 wherein the organ is a heart, liver, bowel, kidney or brain.

114. The method of claim 106 wherein the protein [or factor] is competent to improve the vascular or cerebrovascular circulation.
115. (Amended) A method of treating a human patient comprising the step of site-specific instillation of cells into the patient, wherein the cells originate from the patient and are selected from the group consisting of endothelium, smooth muscle, [fibroblasts, monocytes, macrophages] and parenchymal cells.
116. The method of claim 115, wherein the cells produce protein in the patient.
117. The method of claim 116, wherein the protein is secreted by the cells.
118. The method of claim 116, wherein the protein has a therapeutic effect.
119. The method of claim 118, wherein the protein is an angiogenic factor.
120. The method of claim 116, wherein the protein has a diagnostic effect.
121. The method of claim 115, wherein cells are genetically altered *in vitro* prior to being instilled to the patient.
122. The method of claim 115, wherein the cells are instilled into a body vessel within the patient.
123. The method of claim 122, wherein the vessel is a blood vessel.
124. The method of claim 122, wherein the cells are instilled intravenously.
125. The method of claim 124, wherein the cells are instilled with a catheter.
126. The method of claim 125, wherein the catheter comprises a balloon means.

127. The method of claim 126, wherein the balloon means comprises two spaced apart inflatable members.
128. The method of claim 127, wherein the balloon means further comprises an instillation port positioned between the inflatable members.
129. The method of claim 126, wherein the balloon means further comprises an inflatable member near the distal end of the catheter.
130. The method of claim 129, wherein the balloon means further comprises an instillation port proximal to the inflatable member.
131. The method of claim 122, wherein the cells are instilled surgically.
132. The method of claim 122, wherein the cells are instilled percutaneously.
133. The method of claim 122, wherein the cells are instilled by high pressure instillation.
134. The method of claim 122, wherein the cells are instilled by injection into the patient.
135. The method of claim 134, wherein the injection occurs in a capillary bed.
136. The method of claim 115, wherein the cells are instilled to treat a cardiovascular disease.
137. The method of claim 136, wherein the cardiovascular disease is ischemic cardiomyopathy.
138. The method of claim 115, wherein the cells are instilled into the heart.
139. The method of claim 115, wherein the cells are instilled into the kidney.
140. The method of claim 115, wherein the cells are instilled into the bowel.

141. The method of claim 115, wherein the cells are instilled into the liver.
142. The method of claim 115, wherein the instillation occurs at an angioplasty site following an angioplasty procedure.